

Application No. 10/772,823
Docket No. 2000U042D1-CON2
Reply to Office Action Dated 09/09/2004

Remarks

Informality Correction

In Applicant's copy of the claims as submitted to the Patent Office, there was an extraneous chemical formula located after Claim 5. This was an obvious typographical error, and is removed in the set of claims herein.

Section 102/103 Rejections

The Examiner rejected Claims 1-15 under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over *Brady, III et al.* (US 5,317,036) (hereinafter "*Brady*"). The Applicant traverses these rejections.

Anticipation of a claim can be found when a prior art reference discloses every limitation of the claimed invention, either explicitly or inherently.¹ The Applicant contends that (1) *Brady* does not disclose all of the claim features of the Applicant's claimed invention and that (2) *Brady* cannot be relied upon for inherency of disclosure as there is no rational as to how the present invention as claimed necessarily flows from *Brady*.

Lack of Explicit Disclosure

First, *Brady* cannot be anticipatory by explicit disclosure, nor can it support a prima facie case of obviousness, because nowhere in *Brady* is there a disclosure of a "bimodal polyolefin" or other features of Claim 1. Applicant takes note of the Examiner's implication that the opening phrase of the Claim 1 is a process feature.² However, there is no reason to believe the feature "unprocessed, untreated granular bimodal polyolefin" is in any way a process limitation, as the phrase "unprocessed, untreated granular bimodal" merely describes the state of the claimed "polyolefin". The phrase "granular bimodal polyolefin" certainly is not a process limitation.

It is further noted that the claim feature of "unprocessed, untreated granular" polymer is found in the specification as filed at page 69, paragraph [0261]. The term

¹ *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987).

² Office Action, page 4, first full paragraph.

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"bimodal polymer product" if found throughout, and the polymer product being a "polyolefin" is disclosed at, for example, paragraph [0257].

Lack of Inherent Disclosure

Second, *Brady* does not inherently disclose Applicant's claimed invention. More particularly, the Applicant contends that the Examiner has not shown that all claim elements of the claimed invention necessarily flows from *Brady*.

In the rejection of Applicant's claims as inherent in light of *Brady*, the Examiner cites *In re Best*.³ In *In re Best*, the court outlined a technical rational derived from specific information disclosed in the prior art in order to find inherency.⁴ In that case, it was found that the prior art ("Hansford") had particularly disclosed each claim element of the subject patent application ("*Best*" application), except for the rate of cooling of the composition after having been heated and the removal of an otherwise volatile species generated from the claimed process. In upholding the rejection of the *Best* application, the court outlined the Examiner's rational

The examiner asserted that a major portion of any ammonia generated during calcination would inherently be removed from contact with the zeolite, because the gaseous atmosphere disclosed by Hansford was in the form of a moving stream. Also with respect to Hansford, the examiner believed the cooling rate of the zeolite after stabilization to be within the terms of the appealed process claims.⁵

Thus, the Examiner demonstrated, using an objective technical rational, how each and every claim element in the *Best* application was disclosed by, and necessarily flows from, the

³ *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1997).

⁴ *In re Best* at 1253-54. Specifically, the court outlined the Examiner's rational: "In rejecting claims 1-7 on Hansford, the examiner asserted that a major portion of any ammonia generated during calcination would inherently be removed from contact with the zeolite, because the gaseous atmosphere disclosed by Hansford was in the form of a moving stream. Also with respect to Hansford, the examiner believed the cooling rate of the zeolite after stabilization to be within the terms of the appealed process claims. The claimed product being the unique result of the claimed process, the examiner, therefore, rejected both process and product claims as anticipated by Hansford, or, in any case, as obvious in view of Hansford."

⁵ *In re Best* at 1253-54.

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Hansford disclosure. The Applicant of the present invention contends that the Examiner has not done so here.

The law on this matter is further elucidated in the MPEP. The MPEP, citing *In re Rijckaert*⁶, states that the "fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic."⁷ In *In re Rijckaert*, the court found that the Examiner erred in assuming that there was an inherent relationship between the claimed features in the prior art without finding any rational for that relationship.⁸ To establish inherency:

the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.⁹

It is the Examiner's burden to provide a basis, with extrinsic evidence,¹⁰ that the alleged inherent characteristic necessarily flows from the teachings of the prior art.¹¹

The Applicant contends that the Examiner has impermissibly relied upon "probabilities and possibilities" in finding inherency in the present case. The Examiner merely cites various disclosures in *Brady* without an objective technical rational for how they would necessarily lead to the claimed invention. The Examiner states that *Brady* discloses

- polymers prepared by a gas phase polymerization process of using a reactor with installed components that can be used to continuously mix catalyst components that are in liquid form;
- metallocene based catalyst system that is substantially similar to the catalyst system used for preparing the polymer product of Claims 1-15;

⁶ 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993).

⁷ MPEP § 2112, at 2100-54. (emphasis in original) (citing *In re Rijckaert*, 9 F.3d 1521, 1534 (Fed. Cir. 1993)).

⁸ *In re Rijckaert* at 1533.

⁹ *Id.* at 2100-54 to 2100-55 (citing *In re Robertson*, 169 F.3d 737, 745 (Fed. Cir. 1999)) (emphasis added).

¹⁰ "objective evidence or cogent technical reasoning" MPEP at 2100-55 (citing *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990))

¹¹ *Id.* (citing *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)).

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- polymerization which involves monomers meeting the claimed "ethylene derived units and C₄ to C₁₂ α-olefin derived units".¹²

What is missing is the technical explanation of why the Applicant's claimed "bimodal polyolefin" would necessarily flow from these features. Applicant contends that the Examiner is assuming a relationship, as in *In re Rijckaert*, without providing a rational or identifying specific information in *Brady* as to why these features would necessarily lead to the claimed invention.

Brady does not disclose or suggest a "bimodal polyolefin" nor "sieved neat polymer fractions obtained from 35, 60 and 120 mesh sieve sizes have I₂ values that are within 40% of one another". Further, the Examiner has not made "clear that the missing descriptive matter is necessarily present" in *Brady*. As unpredictable as the chemical arts are,¹³ the Applicant contends that a connection between the Applicant's claim elements cannot be found in the prior art.

What *Brady* does teach is how to make a unimodal polymer. The specification and working examples refer to "the polymerization catalyst", "a catalyst", "the catalyst", "a reactor", etc.¹⁴, and narrow molecular weight distribution polyolefins.¹⁵ The Applicant contends that this would not lead, explicitly or inherently, to the Applicant's claimed invention.

The Applicant thus requests that the anticipation and obviousness rejections be withdrawn.

As to Claims 13 to 15, there is no prohibition against having process features in a claim, in particular, when the base claim is patentable by itself.

¹² Office Action at page 3.

¹³ See, e.g., *Spectra Physics, Inc. v. Coherent, Inc.*, 827 F.2d 1524, 3 USPQ2d 1737 (Fed. Cir. 1987) (discussing unpredictable nature of chemical arts).

¹⁴ US 5,317,036 specification. See, for example, the embodiments at col. 3, lines 55 to 68, and col. 4, lines 1 to 66; col. 7, lines 63-66. See also col. 10, lines 7 ("injection of the catalyst").


¹⁵ Specification at, for example, col. 19, lines 50-53.

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It is submitted that the case is in condition for allowance. The Applicant invites the Examiner to telephone the undersigned attorney if there are any other issues outstanding which have not been presented to the Examiner's satisfaction.

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Date

Respectfully submitted,


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